

Dkt. 57226-A-RE/PJP

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Reissue Application Of:	Tiffany & Company
For:	CUT CORNERED SQUARE MIXED-CUT GEMSTONE
Reissue Application No.:	10/626,376
Reissue Application Filing:	July 24, 2003
Original Patent No.:	6,363,745
Original Patent Granted On:	April 2, 2002
Examiner: Thomas Y. Ho	Art Unit: 3677

1185 Avenue of the Americas  
New York, New York 10036  
January 25, 2005

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

SIR.:

**DECLARATION OF ROBERT S. GREEFF**

I Robert S. Greeff, declare as follows:

1. I am the named inventor of the above-identified patent and reissue application.
2. My education in the field of gemstones is as follows:  
I received a B.S. degree in Geology from Hamilton College. I have taken the education program from the Gemological Institute of America ("GIA") in 1989 and was awarded the title of Graduate Gemologist ("G.G."). The program involves training over the course of several months. The topics studied included the optical and physical aspects of gemstones, as well as classification of gemstones into different types of cuts.
3. I have been a Registered Supplier ("R.S.") with the American Gem Society ("A.G.S.") since about 1990. I was on the Board of Governors of the American Gem Trade Association ("A.G.T.A.") from 2002 to 2004.

4. I have been involved in the field of gemology for about 15 years.
5. I have been employed by Tiffany & Co. ("Tiffany") continuously since about 1990. During the time I have held the positions of diamond grader and diamond buyer. My present position is Director-Diamond Division, a position I have held since 1996.
6. My duties as Director-Diamond Division include selecting diamonds to be acquired by Tiffany for resale in their retail operations, including supervision of the evaluation and grading of those diamonds. I have also designed gemstones, including the gemstone that is the subject of the present patent.
7. The term "step cut" in connection with gemstones has had a well accepted meaning since at least December 1, 1998 to the present. The term "step cut" means a cutting style in which long, narrow, four-sided facets are arranged in rows parallel to the girdle on both the crown and pavilion. The GIA Diamond Dictionary, Third Edition published 1993, a leading authority for terms in the industry, provides this definition. According to the definition, in a step cut the facet lines of the facets are essentially parallel to the girdle.
8. The term "brilliant cut" in connection with gemstones has had a well accepted meaning since at least December 1, 1998 to the present. The term "brilliant-cut" means a cut with a facet arrangement that radiates from the center of the stone towards the girdle and triangular or kite shaped facets. The GIA Dictionary provides this definition. In the brilliant-cut, all or substantially all of the facet lines are not parallel with the girdle.
9. The term "mixed-cut" in connection with gemstones has had a well accepted meaning since at least December 1, 1998 to the present. The term "mixed-cut" means a stone with (a) a brilliant-cut crown and a step-cut pavilion, or (b) vice versa, i.e., a step-cut crown and a brilliant-cut pavilion.
10. As used in the subject patent, the term "mixed-cut" was intended to have the meaning (b) discussed above, and I understand that others working in the gemstone art would have understood that meaning to apply in view of the specification. It is my understanding and belief that persons skilled in the art when reading the claims and specification as a whole would understand that the term "mixed cut" means a "step-cut" crown and a "brilliant-cut" pavilion.
11. It is my understanding and belief that French Patent No. 324,092 relates to a step-cut gemstone, because all of the facets in both the crown and pavilion of this gemstone fit the definition of "step-cut" in the GIA dictionary, none of the facets fit the definition of "brilliant-cut" in the GIA dictionary. It is my understanding and belief that this French Patent is not a "mixed-cut" because it does not have a brilliant-cut crown or brilliant-cut pavilion.

12. It is my understanding and belief that Johnson U.S. Patent No. 5,072,549 relates to a brilliant-cut gemstone, because all of the facets in both the crown and pavilion in this gemstone fit the definition of "brilliant-cut" in the GIA dictionary, and none of the facets fit the definition of "step-cut" in the GIA dictionary. It is my understanding and belief that this Johnson patent is not a "mixed-cut" because it does not have a step-cut crown or a step-cut pavilion.
13. Step-cut gemstones have acquired a separate status in the field than brilliant-cut gemstones, due to their different design objectives. The objective of a step-cut is to achieve an elegant and classic look, which is achieved at the expense of sacrificing dispersion. In contrast, the objective of a brilliant-cut is to achieve a good dispersion, and brilliance, at the expense of a cutting style which does not have the elegant and classic look of a step-cut.
14. It is my belief that one skilled in the art of gemstones, in 1998 or before, would not have been motivated to combine the step-cut crown of French Patent with the brilliant-cut pavilion of the Johnson U.S. Patent because the design objectives of these two designs are different, and because the outline of the girdle in the French Patent is square with cut corners, and the outline of the girdle of the Johnson patent is pentagon, and there is no clear teaching or suggestion on how to combine a cut-cornered square crown with a pentagon pavilion.
15. I hereby declare that all statements made herein on my own knowledge are true and that all statements made herein on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the subject patent.

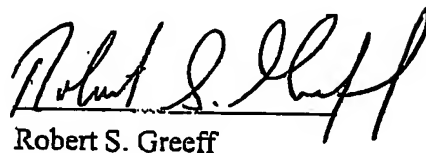
Date: \_\_\_\_\_

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Robert S. Greeff

12. It is my understanding and belief that Johnson U.S. Patent No. 5,072,549 relates to a brilliant-cut gemstone, because all of the facets in both the crown and pavilion in this gemstone fit the definition of "brilliant-cut" in the GIA dictionary, and none of the facets fit the definition of "step-cut" in the GIA dictionary. It is my understanding and belief that this Johnson patent is not a "mixed-cut" because it does not have a step-cut crown or a step-cut pavilion.
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Date:

01/25/06

  
Robert S. Greeff